

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
The Commission's Rules Regarding the)	MB RM No. 11136
the Technical Operation of AM Stations)	
in the 1605-1705 kHz Band)	
)	

To: The Commission

Comments of Hammett & Edison, Inc.

The firm of Hammett & Edison, Inc., Consulting Engineers, respectfully submits these comments in the above-captioned proceeding. This proceeding is the result of the petition filed in October, 2004, by InterMart Broadcasting of Georgia, Inc. to revise technical rules related to AM broadcasting in the Expanded Band. Hammett & Edison, Inc. is a professional service organization that provides consultation to commercial and governmental clients on communications, radio, television, and related engineering matters.

I. Qualifications of Hammett & Edison, Inc.

1. Hammett & Edison, Inc. is well qualified to make comments on this matter, its professional staff having been involved for over 50 years with the design of individual AM broadcast stations, their applications for FCC authorization, and various assessments of station performance. H&E has participated over the years in many rulemakings involving the AM broadcast service.

II. Operating Power in the 1605-1705 kHz Band

2. The Commission specifies the use of Model I facilities in the Expanded Band that InterMart, and others, often erroneously describe as limited to 10 kW, non-directional, daytime power and 1 kW, non-directional, nighttime power. In fact, both FCC Rules¹ and the original Docket² establishing the Expanded Band define Model I facilities as including simple directional antennas for both daytime and nighttime operation and operating powers of more than 1 kW up to the possibility of 10 kW for nighttime operation with consideration for such proposals to be given on a case-by-case basis.

¹ 47 CFR §73.14

² Report and Order to MM Docket No. 87-267, released on October 25, 1991.



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3. In addition, the maximum operating power for use by AM stations in the Expanded Band was restricted to 10 kW in both the 1992 “Agreement Between the United States and Mexico for use of the Band 1605-1705 kHz” and in the “AM Broadcasting Service and the 1997 Interim Working Agreement between the Government of Canada and the Government of United States Relative to the AM Broadcasting Service in the Band 1605-1705.”

4. At the present time, the FCC CDBS shows the AM Broadcasting Service with 1,523³ licensed U.S. stations in the band between 1400 and 1600 kHz out of a current total of 4,738³ licensees in the AM Standard Band. Stations in the 1400 to 1600 kHz band provide comparable service for a given input power to stations in the Expanded Band although propagation between 1400 and 1600 kHz is somewhat better than that above 1600 kHz. Of these 1,523³ stations, only 87³ (5.7% versus 11.8% for all stations in the Standard Band) have licensed facilities with daytime and/or nighttime operating powers of greater than 10 kW. In conjunction with the reduced interference to both daytime and nighttime operations in the Expanded Band, this means that Expanded Band Model I facilities (operating up to 10 kW) can provide comparable and competitive service to over 30% stations currently licensed in the AM band. Therefore, Hammett & Edison believes that the 10 kW maximum power limit in the expanded does not place an undue burden on these stations relative to the rest of the AM spectrum, allows for adequate coverage of the vast majority of communities, and provides for greater opportunities for new stations as growth of the Expanded Band progresses.

III. Lack of Technical Criteria for Evaluation of Applications

5. The true shortcoming of the Expanded Band rules is the nearly complete lack of technical criteria for evaluating applications specifying atypical Model I facilities allowed by FCC Rules, *e.g.*, directional arrays and/or greater than 1 kW nighttime operating power. MM Docket 87-267⁴ allows Expanded Band applicants to specify “simple directional antennas (2 or 3 towers) in order to provide full protection to all stations,” “with power greater than 1 kW.” It further specifies that, “in areas where the major lobe of the pattern could be directed out to sea with no potential for interference, consideration could be given on a case-by-case basis, to the possibility of 10 kW nighttime power.”

6. No definition of “simple directional antennas” is provided other than number of towers, and no criteria is provided under which the case-by-case considerations are to be made. The Commission has, thus far, granted Expanded Band applications specifying four towers

³ Data taken directly from the CDBS on February 3, 2005.

⁴ ¶ 107



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(WWRU, BL-20030206ADU), three towers (KHPY, BL-20021220AE and KDZR, BP-20020115AAN), and two towers (KFNY, BL-20031203AKC). In addition, numerous grants have been made for nondirectional facilities exceeding standard Model I parameters, *i.e.*, using towers taller than 90°. Operating specifications on the various applications for non-directional facilities has differed dramatically. Some non-directional stations, operating from towers taller than 90° in height, have reduced power to ensure that radiation in the horizontal plane did not exceed that produced by a standard Model I facility. Others simply applied for 10 kW daytime and 1 kW nighttime operations at the increased tower height. Both types of applications were routinely granted, without apparent comment, by the Commission. Similarly, directional applications provided varied exhibits to demonstrate protection. KFNY provided no showings demonstrating protection to other stations. WWRU demonstrated protections equivalent to that of a standard Model I facility, while KDZR demonstrated protection based upon Standard Band rules. Again, no apparent explanation of how each of the applications was evaluated has been provided by the Commission. A clear set of technical criteria is required so that present and future stations in the Expanded Band have the necessary information available to prepare applications that they can be certain will meet FCC Rules. This will allow for more efficient use of spectrum, save time and expense on behalf of applicants, and reduce the burden on Commission resources.

IV. Standard Band Allocation Rules Should be Adopted for the Expanded Band

7. As noted in the InterMart Petition, the transition of allotted stations to the Expanded Band is largely complete and the original spacing rules for populating the band have served their purpose. Recognizing the limitation on maximum input power of 10 kW, stations in the 1605-1705 kHz band should be able to utilize facilities that best protect other stations and best serve their communities. In order to move forward toward further development of the 1605-1705 kHz band, and to better serve the public interest, the Commission should revise the Expanded Band rules and adopt the allocation criteria set forth in the Standard Band Rules⁵ for the entire AM Broadcast Service. The success of these Rules in the 540-1600 kHz band has been clearly demonstrated. An additional benefit is afforded by this proposed rule change to stations on 1580, 1590, and 1600 kHz. These stations currently bear an unreasonable burden versus other stations in the Standard Band due to tighter allocation restrictions toward Expanded Band stations, based upon spacing and field strength as opposed to contour protection. Expansion of the Standard Band allocation rules would lift this burden.

⁵ §73.21, §73.26 and §73.37 modified as suggested by InterMart and to reflect the 10 kW power limit in the 1605-1705 kHz band, and §73.182.



V. One-Time Upgrade Opportunity for Current Expanded Band Licensees

8. If current FCC Standard Band Rules are revised to include the 1605-1705 kHz band, stations currently operating in the Expanded Band should be afforded a one-time opportunity for a **minor modification** to upgrade facilities under the new rules prior to new applications for Expanded Band facilities being accepted by the Commission. Such an allowance would provide existing licensees the opportunity to optimize their facilities and improve service to their communities. Further, it would preclude the possibility that existing stations would be unduly constrained by the assignment of new stations to the Expanded Band under different, and potentially more accommodating, protection requirements than those that they were afforded.

VI. Summary

9. While the use of distance spacing was adequate for the initial population of the Expanded Band, the use of established technical criteria to govern allocations of current and future Expanded Band facilities best accommodates the interests of Expanded Band broadcasters and the public that they serve. In addition, the restriction of stations in the Expanded Band to Model I facilities, which have no exact definition and are evaluated on a case-by-case basis by the Commission using unspecified standards, no longer serves a useful purpose and unduly burdens the Commission with evaluating applications without consistent standards.

10. The Commission should remove the restriction to Model I facilities, maintaining the 10 kW input power limit, for stations in the 1605-1705 kHz AM Broadcast Service Band. The Commission also should amend the Rules for the 1605-1705 kHz AM Broadcast Band to adopt all Standard Band allocation criteria for protection of daytime and nighttime AM facilities, revised as required for Expanded Band input power limits. Furthermore, the Commission should allow a one-time opportunity for existing stations operating in the 1605-1705 kHz band to file minor modification applications to upgrade facilities under the new rules prior to the general acceptance of applications for new stations proposing to operate in the Expanded Band.

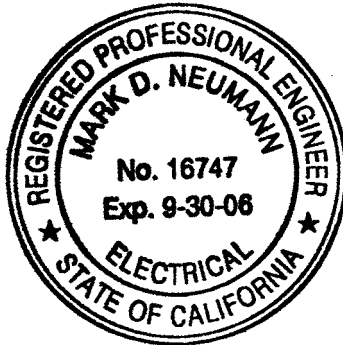


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Respectfully submitted,

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